## **AMENDMENTS TO THE CLAIMS**

1. (Currently Amended) A computer-implemented method, comprising: storing a list of physical resource objects; storing a list of virtual resource objects;

storing a list of parent and child objects, a parent object to represent a physical resource object, and a child object to represent a virtual resource object; and

creating a tree of relationships of the parent and child objects to the physical and virtual resource objects.

- 2. (Original) The method of claim 1, wherein storing a list of virtual resource objects includes storing an object representing system memory bandwidth.
- 3. (Original) The method of claim 2, wherein storing a list of child objects includes storing an object representing a functional unit that consumes bandwidth.
- 4. (Original) The method of claim 3, wherein storing an object representing a functional unit that consumes bandwidth includes storing an indication of the amount of bandwidth consumed.
- 5. (Original) The method of claim 4, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents an overlay unit.
- 6. (Original) The method of claim 4, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents a cursor unit.
- 7. (Original) The method of claim 4, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents a display output unit.

- 8. (Currently Amended) The method of claim 1, wherein a root of the tree represents a physical resource object wherein storing a list of virtual resource objects includes storing an object representing local graphics memory bandwidth.
- 9. (Currently Amended) The method of claim 1 8, wherein storing a list of child objects includes storing an object representing a functional unit that consumes bandwidth.
- 10. (Original) The method of claim 9, wherein storing an object representing a functional unit that consumes bandwidth includes storing an indication of the amount of bandwidth consumed.
- 11. (Original) The method of claim 10, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents an overlay unit.
- 12. (Original) The method of claim 10, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents a cursor unit.
- 13. (Original) The method of claim 10, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents a display output unit.
  - 14. (Currently Amended) A computer-implemented method, comprising: maintaining a record of available resources; maintaining a record of consumed resources;

tracking a relationship among resource producers and resource consumers in a tree data structure, a root of the tree data structure to represent a physical device that consumes the available resources; and

updating the records of available and consumed resources upon a change in relationship among resource producers and resource consumers.

- 15. (Previously Presented) The method of claim 14, wherein tracking relationships among resource producers and resource consumers includes tracking a relationship between a system memory bandwidth producer and a system memory bandwidth consumer.
- 16. (Previously Presented) The method of claim 14, wherein tracking relationships among resource producers and resource consumers includes tracking a relationship between a graphics local memory bandwidth producer and a graphics local memory consumer.
- 17. (Currently Amended) A machine-readable medium having stored thereon instructions which, when executed by a computer system, causes the computer system to perform a method comprising:

storing a list of physical resource objects;

storing a list of virtual resource objects;

storing a list of parent and child objects, a parent object to represent a physical resource object, and a child object to represent a virtual resrouce object; and

creating a tree of relationships of the parent and child objects to the physical and virtual resource objects.

- 18. (Original) The machine-readable medium of claim 17, wherein storing a list of virtual resource objects includes storing an object representing system memory bandwidth.
- 19. (Original) The machine-readable medium of claim 18, wherein storing a list of child objects includes storing an object representing a functional unit that consumes bandwidth.
- 20. (Original) The machine-readable medium of claim 19, wherein storing an object representing a functional unit that consumes bandwidth includes storing an indication of the amount of bandwidth consumed.
- 21. (Original) The machine-readable medium of claim 20, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents an overlay unit.

- 22. (Original) The machine-readable medium of claim 20, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents a cursor unit.
- 23. (Original) The machine-readable medium of claim 20, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents a display output unit.
- 24. (Original) The machine-readable medium of claim 17, wherein storing a list of virtual resource objects includes storing an object representing local graphics memory bandwidth.
- 25. (Original) The machine-readable medium of claim 24, wherein storing a list of child objects includes storing an object representing a functional unit that consumes bandwidth.
- 26. (Currently Amended) The machine-readable medium of claim 17 25, wherein a root of the tree represents a physical resource object wherein storing a list of virtual resource objects includes storing an object representing local graphics memory bandwidth.
- 27. (Original) The machine-readable medium of claim 26, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents an overlay unit.
- 28. (Original) The machine-readable medium of claim 26, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents a cursor unit.
- 29. (Original) The machine-readable medium of claim 26, wherein storing an object representing a functional unit that consumes bandwidth includes storing an object that represents a display output unit.

30. (Currently Amended) A machine-readable medium having stored thereon instructions which, when executed by a computer system, causes the computer system to perform a method comprising:

maintaining a record of available resources;

maintaining a record of consumed resources;

tracking relationships among resource producers and resource consumers in a tree data structure, a root of the tree data structure to represent a physical device that consumes the available resources; and

updating record of available and consumed resources upon a change in relationship among resource producers and resource consumers.

- 31. (Previously Presented) The machine-readable medium of claim 30, wherein tracking relationships among resource producers and resource consumers includes tracking a relationship between a system memory bandwidth producer and a system memory bandwidth consumer.
- 32. (Previously Presented) The machine-readable medium of claim 31, wherein tracking relationships among resource producers and resource consumers includes tracking a relationship between a graphics local memory bandwidth producer and a graphics local memory consumer